6712-01

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 1, 4

[GN Docket No. 15-206; FCC 15-119]

Improving Outage Reporting for Submarine Cables and Enhancing Submarine Cable
Outage Data

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document the Federal Communications Commission (Commission) proposes to require submarine cable licensees, as a condition of their license, to report on outages involving either lost connectivity or degradation of 50 percent or more of a submarine cable's capacity for periods of at least 30 minutes, regardless of whether the cable's traffic is rerouted. The Commission seeks comment on whether this reporting system is necessary, whether the proposed reporting triggers are appropriate, and whether the reporting system proposed is the most efficient means to accomplish the Commission's goals of gaining visibility into the operational status of submarine cables. The document also seeks comment on ways in which the Commission can act to improve the submarine cable deployment process either on its own accord or by coordinating with other stakeholders.

DATES: Submit comments on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] and reply comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments, identified by docket number GN 15-206, by any of the following methods:

- Federal Communications Commission's Web Site: http://fjallfoss.fcc.gov/ecfs2/. Follow the instructions for submitting comments.
- Mail: U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445
 12th Street, SW, Washington DC 20554. Commercial overnight mail (other than U.S.
 Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive,
 Capitol Heights, MD 20743.
- People with Disabilities: Contact the FCC to request reasonable accommodations
 (accessible format documents, sign language interpreters, CART, etc.) by e-mail:
 FCC504@fcc.gov or phone: 202-418-0530 or TTY: 202-418-0432.

Parties wishing to file materials with a claim of confidentiality should follow the procedures set forth in section 0.459 of the Commission's rules. Confidential submissions may not be filed via ECFS but rather should be filed with the Secretary's Office following the procedures set forth in 47 CFR 0.459. Redacted versions of confidential submissions may be filed via ECFS. For detailed instructions for submitting comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: Michael D. Saperstein, Jr., Attorney Advisor, Public Safety and Homeland Security Bureau, (202) 418-7008 or michael.saperstein@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's <u>Notice of Proposed Rulemaking (NPRM)</u> in GN Docket No. 15-206, released on September 18, 2015. The full text of this document is available for public inspection during regular business hours in the FCC Reference Center, Room CY–A257, 445 12th Street SW, Washington, DC 20554, or online at https://www.fcc.gov/document/improving-outage-reporting-submarine-cables.

Synopsis of Notice of Proposed Rulemaking

I. INTRODUCTION

Submarine (or "undersea") cables provide the primary means of connectivity – voice, data and Internet – between the mainland United States and consumers in Alaska, Hawaii, Guam, American Samoa, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands, as well as connectivity between the United States and the rest of the world. Given the role of submarine cables to the nation's economic and national security, there is value to ensuring that infrastructure is reliable, resilient and diverse. Today, however, the ad hoc approach to outage reporting for undersea cables has resulted in a gap in the sufficiency of the information that the Commission staff receives from service providers. To effectuate our statutory obligations of promoting the public interest and our nation's economic and national security, we need the ability to (1) be advised of undersea cable outages when they occur; (2) receive the information necessary to understand the nature of the damage and potential impacts on critical U.S. economic sectors, national security, and other vital interests; and (3) enhance coordination and help facilitate restoration of service in outage events.

In this <u>Notice of Proposed Rulemaking</u> "<u>NPRM</u>"), we propose to require submarine cable licensees to report outages involving either lost connectivity or degradation of 50 percent or more of an undersea cable's capacity for periods of at least 30 minutes, regardless of whether the cable's traffic is re-routed. We also propose to amend the submarine cable landing license rules to require compliance with the outage reporting requirements.

II. DISCUSSION

In this <u>NPRM</u> we propose rules to improve the Commission's present lack of visibility on undersea cable operational status by requiring undersea cable licensees to provide outage

standards and triggers. We also propose to revise part 1 of the rules governing submarine cable licenses to ensure compliance with the outage reporting requirements. We seek comment on all aspects of this proposal, including the definitions, degradation thresholds, and reporting structure for these requirements.

A. Extending Mandatory Outage Reporting to Submarine Cables

Undersea Cable Information System (UCIS). In 2008, in cooperation with other Federal agencies, and in support of Federal national security and emergency preparedness communications programs, the Commission began UCIS as a voluntary outage reporting system. Licensees that elect to use UCIS are asked to provide four categories of information for each submarine cable with a cable landing in the United States: (1) A terrestrial route map; (2) a location spreadsheet; (3) a general description of restoration plans in the event of an incident; and (4) system restoration messages. The Commission's experience with the ad hoc nature of this reporting approach highlights two significant concerns: (1) the Commission only receives information on about one-fourth of the cables; and (2) the information submitted is neither uniform, complete, nor consistent with respect to reporting triggers, form, or substance. We seek comment on licensees' evaluation of their participation in the UCIS program. To what extent and under what circumstances do submarine cable licensees make use of this tool? How many outages, planned or unplanned, does a licensee experience per year? Are there discernable patterns to submarine cable outages?

Based on our experience, we believe that the Commission needs access to more timely and consistent reporting and information to assess the operational status of submarine cables, including any outages and the associated restoration status of these cables. We seek comment on

whether the approach we propose in this item achieves our policy goals, and whether there are other approaches that may also achieve our policy goals. Is there a manner in which the Commission could maintain the UCIS model, either in format or in substance, and ensure it receives the necessary data on submarine cable operational status? What changes would need to be made to the current system?

B. Proposed Submarine Cable Reporting System

In light of the foregoing, we propose to replace UCIS in its entirety by extending modified outage reporting requirements in part 4 of our rules to submarine cable licensees.

1. Covered Providers

Pursuant to the Cable Landing License Act and Executive Order 10530, the Commission has promulgated cable landing licensing rules that require a person or entity to obtain a cable landing license to connect: (1) The contiguous United States with any foreign country; (2) Alaska, Hawaii, or United States territories or possessions with a foreign country, the contiguous United States, or with each other; and (3) points within the contiguous United States, Alaska, Hawaii, or a territory or possession in which the cable is laid within international waters (e.g., Washington State to Alaska). The following entities are required to be licensees on a cable landing license: (1) any entity that owns or controls a cable landing station in the United States; and (2) all other entities owning or controlling a five percent or greater interest in the cable system and using the U.S. points of the cable system. We note that although an entity with less than 5 percent ownership in a submarine cable is not required to be a licensee under the current rules, it may be a licensee, particularly on cables licensed prior to the rule change in 2002.

In order to ensure resiliency of these critically important undersea cables, regardless of whether they are used for domestic or international voice and data traffic, we propose to require

that all submarine cable licensees will be subject to Part 4's reporting requirements as further described in this Notice. Specifically, we propose to amend section 1.767 to make outage reporting a condition of each cable landing license. We seek comment on this proposal. Are there any categories of licensees that should be exempted from mandatory outage reporting? If so, why? Are there any entities subject to the Commission's jurisdiction (e.g., international communications service providers) that are not licensees that should be covered by these rules? How would applying these rules to such providers affect our legal analysis of our authority?

Many submarine cables are jointly owned and operated by multiple licensees in a consortium. We seek comment on the assumption that, should an outage occur, it will generally cause a disruption for all licensees of that submarine cable. Based on that premise, and in an effort to minimize the burden both on licensees and the Commission, we propose that where there are multiple licensees of the same cable, only one licensee per cable will be required to file an outage report. In particular, we propose an approach whereby all licensees sharing a submarine cable would acknowledge and provide consent for a designated licensee to file on behalf of the cable should an outage occur. We seek comment on this approach.

We observe that using a single licensee to coordinate filing is consistent with our treatment of submarine cables in other contexts. We seek comment on whether requiring only one licensee to file outage data on cables with multiple licensees would be efficacious. Does such an approach present a risk that the Commission will receive insufficient or otherwise incomplete information? Will the "Responsible Licensee" always have sufficient information to timely file and provide a full and accurate report? Should we require licensees to formally designate with the Commission one "Responsible Licensee" per submarine cable to bear the reporting obligation where there are multiple licensees? Does designating a "Responsible

Licensee" place that licensee in the position of having to get information from a different licensee who caused or experienced the outage in order to comply with full and accurate reporting requirements?

If we adopt a "Responsible Licensee" reporting paradigm to enhance administrative efficiency and convenience, we believe that every submarine cable licensee has a duty to ensure that outages are properly and adequately reported. We seek comment on this approach. Is such an approach equitable and capable of efficient implementation? Would such an approach create the right incentives for co-licensees to work together to quickly and accurate identify and report on outages? If reports are not timely-filed or accurate due to inability of the "Responsible Licensee" to obtain necessary information from the licensee who caused the outage, would enforcement action be appropriate against the "Responsible Licensee" only, or against co-licensees? Should each licensee be jointly and severally liable for any forfeiture? Are the administrative efficiencies of the Responsible Licensee system beneficial to reporting entities? Would the Responsible Licensee system complicate the Commission's ability to ensure proper reporting?

2. Defining a Reportable Outage or Disruption

We propose that an outage sufficient to trigger Part 4 reporting exists for submarine cables if there is a failure or significant degradation in the performance of a submarine cable, regardless of whether traffic traversing that cable can be re-routed to an alternate cable. This proposal, analogous to part 4 reporting for simplex outages, seems appropriate given the possibility of damage to multiple cables due to one or multiple related or unrelated events and the relatively small number of undersea cables available for re-routing generally. We seek comment on this proposal. How do licensees generally provide redundancy, and what are the

notable effects on other services, if any?

Further, we propose reporting of a submarine cable disruption when either: (i) an event occurs in which connectivity in either the transmit mode or the receive mode is lost for at least 30 minutes; or (ii) an event occurs in which 50 percent or more of a cable's capacity in either the transmit mode or the receive mode is lost for at least 30 minutes, regardless of whether the traffic is re-routed. In this proposal we distinguish connectivity, which is the fundamental ability to transmit a signal, from capacity, which speaks to the cable's bandwidth or throughput that it is capable of transmitting at any one time. We seek comment on all aspects of this proposal.

We seek comment on whether there are more specific technical aspects of submarine cable performance or operation that, if reported, would enable the Commission to perform more sophisticated and useful outage reporting analysis. Are there any elements of the UCIS reporting structure that should remain if we adopt our proposal to require submarine cable outages under Part 4 of our rules? If we were to retain UCIS, are these reporting elements still applicable? Are there other technical specifications or aspects of submarine cable performance that should trigger a reporting requirement?

3. Report Information, Format and Timing

We propose to integrate submarine cable outage reporting into the existing NORS platform because it has proven to be an efficient mechanism for both reporting entities and Commission analysis. Our proposed system is similar, but not identical, to other part 4 outage reporting requirements. Here, we propose a three-report system that requires a Notification, an Interim Report to inform the Commission when repairs have been scheduled, and a Final Report for each outage event. We propose that in the event of a planned outage, licensees would not be required to file an Interim Report if the planned nature of the event was appropriately signaled in

the Notification.

Under our proposal, a licensee would be required to file a Notification in NORS within 120 minutes from the time that the licensee has determined that an event is reportable. We propose that the Notification would include:

- The name of the reporting entity;
- The name of the cable and a list of all licensees for that cable;
- A brief description of the event, including root cause;
- Whether the event is planned or unplanned;
- The date and time of onset of the outage (for planned events, this is the estimated start time/date of the repair);
- Nearest cable landing station;
- Approximate location of the event (either in nautical miles from the nearest cable landing station or in latitude and longitude);
- Best estimate of the duration of the event (total amount of time connectivity will be lost or 50 percent or more of the capacity will be lost);
- A contact name, contact email address, and contact telephone number by which the Commission's technical staff may contact the reporting entity.

We seek comment on all aspects of our proposed Notification. Should we require reporting of additional technical elements of submarine cable performance that would enable the Commission to perform more thorough and systematic outage reporting analysis? What technical elements would be appropriate to include in the Notification and do they differ from those that should be included in the Interim Report and Final Report? Are all of the reporting elements proposed generally known, or knowable with due diligence, to the licensees at the time the Notification

would be due? If not, what elements are generally unknown at this stage and when do licensees receive such information? If the outage is a planned outage, should we require advance notification of the planned outage?

Following the Notification, we propose to require licensees to file an Interim Report, if applicable (i.e., for an unplanned outage), when the repair has been scheduled. We believe that a licensee will have significantly more information about expected repair times after it has scheduled its undersea repair. Accordingly, we propose to require an Interim Report within 120 minutes of scheduling the repair. We propose that the Interim Report would include:

- The name of the reporting entity;
- The name of the cable:
- A brief description of the event, including root cause;
- The date and time of onset of the outage;
- Nearest cable landing station;
- Approximate location of the event (either in nautical miles from the nearest cable landing station or in latitude and longitude);
- Best estimate of when the cable is scheduled to be repaired, including approximate arrival time and date of the repair ship, if applicable;
- A contact name, contact email address, and contact telephone number by which the
 Commission's technical staff may contact the reporting entity.

We seek comment on all aspects of our proposed Interim Report. We note that the NORS interface automatically populates the fields where information required duplicates that of the Notification, so the reporting licensee will not have to reenter data unless it is to amend or edit a previously-supplied response. Should we require reporting of additional technical elements of

submarine cable performance that would enable the Commission to perform more thorough and systematic outage reporting analysis? What technical elements would be appropriate to include in the Interim Report and do they differ from those that should be included in the Notification and Final Report? Are all of the reporting elements proposed generally known, or knowable with due diligence, to the licensees at the time the Interim Report would be due? If not, what elements are generally unknown at this stage and when do licensees receive such information?

After the Interim Report (if applicable), we propose to require licensees to file a Final Report seven days after the repair is completed. We propose that the Final Report would include:

- The name of the reporting entity;
- The name of the cable;
- Whether the outage was planned or unplanned;
- The date and time of onset of the outage (for planned events, this is the start date and time of the repair);
- A brief description of the event;
- Nearest cable landing station;
- Approximate location of the event (either in nautical miles from the nearest cable landing station or in latitude and longitude);
- Duration of the event (total amount of time connectivity was lost or 50 percent or more of the capacity is lost);
- The restoration method;
- A contact name, contact email address, and contact telephone number by which the
 Commission's technical staff may contact the reporting entity.

We seek comment on all aspects of our proposed Final Report. We note that the NORS interface automatically populates the fields where information required duplicates that of the Notification and Interim Report, so the reporting licensee will not have to reenter data unless it is to amend or edit a previously-supplied response. Should we require reporting of additional technical elements of submarine cable performance that would enable the Commission to perform more thorough and systematic outage reporting analysis? What technical elements would be appropriate to include in the Final Report and do they differ from those that should be included in the Notification and Interim Report? Are all of the reporting elements proposed generally known, or knowable with due diligence, to the licensees at the time the Final Report would be due? If not, what elements are generally unknown at this stage and when do licensees receive such information?

We propose to adopt substantially the same wording codified in section 4.11 of our rules for the submarine cable outage reporting system to the extent that it addresses authorized personnel, the requirement of good faith, the method of attestation that the information supplied is complete and accurate, and the manner of filing. We seek comment on applying the concepts of this rule to submarine cable reporting.

4. Confidentiality

Section 4.2 of the Commission's rules governing outage reporting states that "[r]eports filed under this part will be presumed to be confidential." We propose to continue treating this information as presumptively confidential. We seek comment on this proposal. We observe that NORS data is routinely shared with the U.S. Department of Homeland Security (DHS). The Commission is currently seeking comment on whether to share its Part 4 NORS outage reporting data with other federal agencies and/or state governments. We seek comment on whether the

decision the Commission adopts regarding sharing outage reporting in the current NORS context should be applicable to information the Commission would receive if it were to extend the outage reporting requirements to submarine cables. What types of federal agencies and/or state and territorial governments would need to access information on submarine cable outage reports? Should such sharing be limited to cases where there is a direct effect on the government entity?

C. Costs and Benefits of Outage Reporting Requirements

We tentatively conclude that the benefits to be gained from this new reporting regime will substantially outweigh any costs to providers. The benefit of the Commission's situational awareness and ability to facilitate communications alternatives, which would come as a result of promulgating these rules, is particularly amplified with submarine cables due to the relatively small number of submarine cable serving as conduits for traffic to and from the United States.

We are proposing a narrowly-tailored submarine cable outage reporting regime that we believe will have minimal cost to the entities reporting those outages. We seek comment on the tentative conclusion that our proposal's expected benefits will far exceed the minimal costs imposed on reporting entities. In our UCIS OMB Supporting Statement we estimated that the reporting required would cost \$265,000 for 5,300 total hours spent on annual reporting (*i.e.*, developing the initial reporting on terrestrial route maps, undersea cable location spreadsheet and restoration capabilities, updating the initial reports as necessary and reporting outages as they occur); we believe that the reporting system we propose in this NPRM would have substantially lower costs of compliance because we have eliminated many of the elements requested in UCIS. We estimated that there would be 40 annual restoration or trouble reports. Is this figure still accurate? There are roughly 100-200 incidents requiring repair each year globally, and the majority of these incidents appear to have occurred on cables not directly connected to the

United States. In light of the relatively small number of submarine cable incidents that appear to have affected FCC-licensed cables directly, and depending on how we define a reportable incident, we seek input on the burden of such reporting on filing parties. Do licensees already collect the information we are seeking? If so, how much extra effort would be required to input that information into the proposed database?

We conservatively estimate that the total annual burden will be \$8,000 for the entire industry once the licensees have set up adequate reporting processes. For the annual burden, we conservatively estimate that there will be 50 reportable events. We conservatively estimate based on our experience with NORS reporting that the Notification will require 15 minutes to complete, the Interim Report will require 45 minutes to complete, and the final report will require one hour to complete, for a total of two hours per reportable event. At an assumed labor cost of \$80/hour, and two hours for each of the 50 reporting cycles, the total cost of compliance would be \$8,000. We seek comment on this analysis. We recognize that there are costs associated with implementing any new reporting system. What are the incremental costs of implementing the proposed NORS reporting system, recognizing a reporting system may already be in place for filing UCIS reports? To what extent are we proposing to require information that is not readily available as part of the normal course of business in the event of an outage? Are there costs associated with initiating the Responsible Licensee system, such as inter-licensee negotiations, that would add to the burdens associated with our proposal? Does the Responsible Licensee system alleviate the need for many licensees to establish an internal reporting system if they previously lacked one? We seek comment on all aspects of our analysis.

D. Improving Submarine Cable Deployment Processes and Interagency Coordination

The installation of submarine cable systems involves authorizations or permits from a number of federal and state agencies. We seek comment on the submarine cable deployment processes generally, and request any information concerning, for example, burdensome regulations or other issues that may impede rapid deployment and maintenance of undersea cables. We also seek comment on whether there are any actions we can take or steps we can encourage other agencies to take.

With respect to interagency coordination, the International Bureau, which is responsible for administering submarine cable licenses, in coordination with the Public Safety and Homeland Security Bureau, will reach out to relevant government agencies, under its existing delegated authority, to develop and improve interagency coordination processes and best practices vis-à-vis submarine cable deployment activities and related permits and authorizations to increase transparency and information sharing among the government agencies, cable licensees, and other stakeholders. The Bureaus will report their progress to the Commissioners. Are there additional means in which we may take actions to facilitate investments in and the rapid construction of reliable submarine cable network infrastructure?

E. Legal Authority

The Cable Landing License Act and Executive Order 10530 provide the Commission with authority to grant, withhold, condition and revoke submarine cable landing licenses. We tentatively conclude that that the Cable Landing License Act and Executive Order 10530 provide the Commission authority to adopt the outage reporting rules proposed in this NPRM and to impose compliance obligations with the proposed outage reporting requirements. We seek

comment on the Commission's authority under the Cable Landing License Act and Executive Order 10530 to adopt the Part 1 and Part 4 rules on outage reporting obligations proposed in the NPRM.

IV. PROCEDURAL MATTERS

A. Regulatory Flexibility Act

As required by the Regulatory Flexibility Act of 1980 (RFA), the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the proposals addressed in the NPRM. The IRFA is set forth in Section VII of this NPRM. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed on or before the dates indicated on the first page of this NPRM. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this NPRM, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the NPRM and IRFA (or summaries thereof) will be published in the Federal Register.

B. Paperwork Reduction Act of 1995

The NPRM contains proposed new information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget to comment on the information collection requirements contained in the NPRM, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

C. Ex Parte Rules

The proceeding is a "permit-but-disclose" proceeding in accordance with the Commission's ex parte rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral ex parte presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the <u>ex parte</u> presentation was made; and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during ex parte meetings are deemed to be written ex parte presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written ex parte presentations and memoranda summarizing oral ex parte presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's <u>ex parte</u> rules.

D. Comment Filing Procedures

Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419,

interested parties may file comments and reply comments on or before the dates indicated on the first page of the NPRM. Comments should be filed in GN Docket No. 15-206. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://fjallfoss.fcc.gov/ecfs2/.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's
 Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8 a.m. to 7 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of <u>before</u> entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

Confidential Materials: Parties wishing to file materials with a claim of confidentiality should follow the procedures set forth in section 0.459 of the Commission's rules. Confidential submissions may not be filed via ECFS but rather should be filed with the Secretary's Office following the procedures set forth in 47 CFR 0.459. Redacted versions of confidential submissions may be filed via ECFS.

V. ORDERING CLAUSES

Accordingly, IT IS ORDERED pursuant to sections 1, 4(i), 4(j), 4(o), of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i)-(j) & (o), and pursuant to the Cable Landing License Act of 1921, 47 U.S.C. 34-39 and 3 U.S.C. 301 that this Notice of Proposed Rulemaking in GN Docket No. 15-206 IS ADOPTED.

IT IS FURTHER ORDERED that the Commission's Consumer and Governmental

Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Notice of Proposed

Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for

Advocacy of the Small Business Administration.

VII. Initial Regulatory Flexibility Analysis

As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the recommendations in this NPRM. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments provided in

"Comment Period and Procedures" of this <u>NPRM</u>. The Commission will send a copy of this <u>NPRM</u>, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the <u>NPRM</u> and IRFA (or summaries thereof) will be published in the Federal Register.

A. Need for, and Objectives of, the Proposed Rules

We propose measures to improve the utility and effectiveness of the current scheme for receiving information on submarine cable outages, with the ultimate goal of enhancing both our overall understanding of submarine cable system status and our knowledge regarding specific outages disruptions and restoration efforts.

B. Legal Basis

The NPRM is adopted pursuant to sections 1, 4(i), 4(j), and 4(o) of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i)-(j) & (o) and pursuant to the Cable Landing License Act of 1921, 47 U.S.C. 34-39 and 3 U.S.C. 301.

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

The RFA directs agencies to provide a description of, and, where feasible, an estimate of the number of small entities that may be affected by the proposals, if adopted. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A small business concern is one that: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).

The proposals in the <u>NPRM</u> apply only to entities licensed to construct and operate submarine cables under the Cable Landing License Act. The <u>NPRM</u> proposes to have submarine cable licensees affected by a service outage file outage reports with the Commission describing the outage and restoration.

The entities that the <u>NPRM</u> proposes to require to file reports are a mixture of both large and small entities. The Commission has not developed a small business size standard directed specifically toward these entities. However, as described below, these entities fit into larger categories for which the SBA has developed size standards that provide these facilities or services.

Facilities-based Carriers. Facilities-based providers of international telecommunications services would fall into the larger category of interexchange carriers.

Neither the Commission nor the SBA has developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. Census Bureau data for 2007, which now supersede data from the 2002 Census, show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer and 44 firms had had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the majority of these Interexchange carriers can be considered small entities. According to Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange services. Of these 359 companies, an estimated 317 have 1,500 or fewer employees and 42 have more than 1,500 employees. Consequently, the Commission estimates that the majority of interexchange service

providers are small entities that may be affected by rules adopted pursuant to the NPRM.

In the 2009 annual traffic and revenue report, 38 facilities-based and facilities-resale carriers reported approximately \$5.8 billion in revenues from international message telephone service (IMTS). Of these, three reported IMTS revenues of more than \$1 billion, eight reported IMTS revenues of more than \$100 million, 10 reported IMTS revenues of more than \$50 million, 20 reported IMTS revenues of more than \$10 million, 25 reported IMTS revenues of more than \$5 million, and 30 reported IMTS revenues of more than \$1 million. Based solely on their IMTS revenues the majority of these carriers would be considered non-small entities under the SBA definition.

The 2009 traffic and revenue report also shows that 45 facilities-based and facilities-resale carriers (including 14 who also reported IMTS revenues) reported \$683 million for international private line services; of which four reported private line revenues of more than \$50 million, 12 reported private line revenues of more than \$10 million, 30 reported revenues of more than \$1 million, 34 reported private line revenues of more than \$500,000; 41 reported revenues of more than \$100,000, while 2 reported revenues of less than \$10,000.

The 2009 traffic and revenue report also shows that seven carriers (including one that reported both IMTS and private line revenues, one that reported IMTS revenues and three that reported private line revenues) reported \$50 million for international miscellaneous services, of which two reported miscellaneous services revenues of more than \$1 million, one reported revenues of more than \$500,000, two reported revenues of more than \$200,000, one reported revenues of more than \$50,000, while one reported revenues of less than \$20,000. Based on its miscellaneous services revenue, this one carrier with revenues of less than \$20,000 would be considered a small business under the SBA definition. Based on their private line revenues,

most of these entities would be considered non-small entities under the SBA definition.

Providers of International Telecommunications Transmission Facilities. According to the 2012 Circuit-Status Report, 61 U.S. international facility-based carriers filed information pursuant to section 43.82. Some of these providers would fall within the category of Interexchange Carriers, some would fall within the category of Wired Telecommunications Carriers, while others may not. The Commission has not developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. Census Bureau data for 2007, which now supersede data from the 2002 Census, show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer and 44 firms had had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the majority of these Interexchange carriers can be considered small entities. According to Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange services. Of these 359 companies, an estimated 317 have 1,500 or fewer employees and 42 have more than 1,500 employees. The circuit-status report does not include employee or revenue statistics, so we are unable to determine how many carriers could be considered small entities under the SBA standard. Although it is quite possible that a carrier could report a small amount of capacity and have significant revenues, we will consider those 61 carriers to be small entities at this time. In addition, of the 79 carriers that filed an annual circuit-status report for 2009, there were at least four carriers that reported no circuits owned or in use at the end of 2009.

Operators of Undersea Cable Systems. The NPRM seeks comment on whether

submarine cable facilities should be subject to reporting requirements in the event of an outage. Neither the Commission nor the SBA has developed a size standard specifically for operators of undersea cables. Such entities would fall within the large category of Wired Telecommunications Carriers. The size standard under SBA rules for that category is that such a business is small if it has 1,500 or fewer employees. Census Bureau data for 2007, which now supersede data from the 2002 Census, show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer, and 44 firms had had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the majority of these carriers can be considered small entities. We do not have data on the number of employees or revenues of operators of undersea cables. Because we do not have information on the number of employees or their annual revenues, we shall consider all such providers to be small entities for purposes of this IRFA.

Operators of Non-Common Carrier International Transmission Facilities. At present, carriers that provide common carrier international transmission facilities over submarine cables are not required to report on outages, though the NPRM seeks comment on whether such carriers should be required to provide outage reports. Neither the Commission nor the SBA has developed a small business size standard specifically for providers of non-common carrier terrestrial facilities. The operators of such terrestrial facilities would fall within the larger category of Wired Telecommunications Carriers. The appropriate size standard under SBA rules for the Wired Telecommunications Carriers category is that such a business is small if it has 1,500 or fewer employees. Census Bureau data for 2007, which now supersede data from the 2002 Census, show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer and 44 firms had had employment of 1000

or more.

Incumbent Local Exchange Carriers. Because some of the international terrestrial facilities that are used to provide international telecommunications services may be owned by incumbent local exchange carriers, we have included small incumbent local exchange carriers in this present RFA analysis, to the extent that such local exchange carriers may operate such international facilities. (Local exchange carriers along the U.S.-border with Mexico or Canada may have local facilities that cross the border.) Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange carriers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. Census Bureau data for 2007, which now supersede data from the 2002 Census, show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer and 44 firms had had employment of 1000 or more. According to Commission data, 1,307 carriers reported that they were incumbent local exchange service providers. Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees. As noted above, a "small business" under the RFA is one that, inter alia, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation." The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent local exchange carriers are not dominant in their field of operation because any such dominance is not "national" in scope. Consequently, the Commission estimates that most providers of local exchange service are small entities that may be affected by the rules and policies proposed in the NPRM. We have therefore included small incumbent local exchange carriers in this RFA analysis, although we

emphasize that this RFA action has no effect on Commission analysis and determinations in other, non-RFA contexts. Thus under this category and the associated small business size standard, the majority of these incumbent local exchange service providers can be considered small providers.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

The NPRM seeks comment on a proposal to mandate outage reporting requirements to all submarine cable licensees. An outage occurs when a licensee experiences an event in which (1) connectivity in either the transmit mode or receive mode is lost for at least 30 minutes; or (2) 50 percent or more of the capacity of the submarine cable, in either transmit or receive mode, is lost for at least 30 minutes. After a triggering event, the reporting requirement consists of three filings, the Notification, an Interim Report for unplanned outages, and the Final Report, which provide the Commission important data to improve the Commission's situational awareness on the operational status of submarine cables. We expect the filed reports will be based on information already within the reporting entity's possession, therefore these should be considered routine reports, though we seek comment on this assumption.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): "(1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting

requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage or the rule, or any part thereof, for small entities."

The NPRM seeks comment on its cost-benefit analysis of imposing this new reporting requirement, including information on the extent to which submarine cable licensees already possess the outage information that we propose to require. The Commission takes the position that the national security and economic benefits of providing the Commission with situational awareness of the operating status submarine cables outweighs the minimal cost of reporting proposed. We seek comment on that view. The Commission proposes these rules only after its existing ad hoc and voluntary system of reporting submarine cable outages has failed to provide the Commission with the information it requires. In addition, the Commission proposes that where there are multiple licensees of a single submarine cable that experiences an outage, the licensees of that cable can designate a Responsible Licensee to report on the outage on behalf of

all affected licensees. While each licensee maintains the responsibility of ensuring that the proper reports are filed, this process can cut down on the individual reporting requirements for many licensees, possibly including small businesses. The Commission seeks comment on how it can create the most efficient and least burdensome process possible while still meeting its goals.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed

Rules

None.

List of Subjects in 47 CFR parts 1 and 4

Disruptions to Communications, Telecommunications, Reporting and recordkeeping requirements

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch,

Secretary.

PROPOSED RULES

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 CFR parts 1 and 4 as follows:

PART 1 – PRACTICE AND PROCEDURE

- 1. The authority citation for part 1 is revised to read as follows:
- Authority: 47 U.S.C. 151, 154(i), 155, 157, 225, 303(r), 309, 1403, 1404, 1451, and 1452.
- 2. Section 1.767 is amended by adding paragraph (g)(15), revising paragraph (n) and adding paragraph (o) to read as follows:

§ 1.767 Cable landing licenses.

- * * * * *
- (g) * * *
- (15) Licensees shall file submarine cable outage reports as required in part 4 of this chapter.
- * * * * *
- (n)(1) With the exception of submarine cable outage reports, and subject to the availability of electronic forms, all applications and notifications described in this section must be filed electronically through the International Bureau Filing System (IBFS). A list of forms that are available for electronic filing can be found on the IBFS homepage. For information on electronic filing requirements, see part 1, subpart Y, and the IBFS homepage at http://www.fcc.gov/ibfs. See also §§ 63.20 and 63.53 of this chapter.
- (2) Submarine cable outage reports must be filed as set forth in part 4 of this chapter.
- (o) <u>Outage Reporting</u> Licensees of a cable landing license granted prior to March 15, 2002 shall file submarine cable outage reports as required in part 4 of this chapter.

PART 4 – DISRUPTIONS TO COMMUNICATIONS

3. The authority citation for part 4 is revised to read as follows:

Authority: 47 U.S.C. 34-39, 154, 155, 157, 201, 251, 307, 316, 615a-1, 1302(a), and 1302(b); 5 U.S.C. 301, and Executive Order no. 10530.

4. Section 4.1 is revised to read as follows:

§ 4.1 Scope, basis, and purpose.

- (a) In this part, the Federal Communications Commission is setting forth requirements pertinent to the reporting of disruptions to communications and to the reliability and security of communications infrastructures.
- (b) The definitions, criteria, and reporting requirements set forth in §§ 4.2 through 4.13 of this part are applicable to the communications providers defined in § 4.3 of this part.
- (c) The definitions, criteria, and reporting requirements set forth in § 4.15 of this part are applicable to providers of submarine cable licensees who have been licensed pursuant to 47 U.S.C. 34-39.
- 5. Add § 4.15, to read as follows:

§ 4.15 Submarine Cable Outage Reporting

(a) Definitions

- (1) For purposes of this section, "outage" is defined as a failure or degradation in the performance of that communications provider's cable regardless of whether the traffic can be rerouted to an alternate cable.
- (2) An "outage" requires reporting under this section when:
 - (i) An event occurs in which connectivity in either the transmit mode or the receive mode is lost for at least 30 minutes; or

(ii) Fifty percent or more of the capacity of the submarine cable, in either the transmit mode or the receive mode, is lost for at least 30 minutes.

(b) Outage Reporting

- (1) For each outage that requires reporting under this section, the licensee (or Responsible Licensee as noted herein) shall provide the Commission with a Notification, and Interim Report (subject to the limitations on planned outages in paragraph (b)(2)(iii) of this section), and a Final Outage Report.
 - (i) For a submarine cable that is jointly owned and operated by multiple licensees, the licensees of that cable may designate a Responsible Licensee that files outage reports under this rule on behalf of all licensees on the affected cable.
 - (ii) Licensees opting to designate a Responsible Licensee must jointly notify the Chief of the Public Safety and Homeland Security Bureau's Cybersecurity and Communications Reliability Division of this decision in writing. Such notification shall include the name of the submarine cable at issue; contact information for all licensees on the submarine cable at issue, including the Responsible Licensee;
- (2) Notification, Interim, and Final Outage Reports shall be submitted by a person authorized by the licensee to submit such reports to the Commission.
 - (i) The person submitting the Final Outage Report to the Commission shall also be authorized by the licensee to legally bind the provider to the truth, completeness, and accuracy of the information contained in the report. Each Final report shall be attested by the person submitting the report that he/she has read the report prior to submitting it and on oath deposes and states that the information

contained therein is true, correct, and accurate to the best of his/her knowledge and belief and that the licensee on oath deposes and states that this information is true, complete, and accurate.

- (ii) The Notification is due within 120 minutes of the time of determining that an event is reportable. The Notification shall be submitted in good faith. Licensees shall provide: The name of the reporting licensee; the name of the cable and a list of all licensees for that cable; the date and time of onset of the outage (for planned events, this is the estimated start time/date of the repair); a brief description of the event, including root cause; nearest cable landing station; approximate location of the event (either in nautical miles from the nearest cable landing station or in latitude and longitude); best estimate of the duration of the event (total amount of time connectivity is lost or 50 percent or more of the capacity is lost); whether the event is planned or unplanned; and a contact name, contact email address, and contact telephone number by which the Commission's technical staff may contact the reporting entity.
- (iii) The Interim Report is due within 120 minutes of scheduling a repair to a submarine cable. The Interim Report shall be submitted in good faith. Licensees shall provide: The name of the reporting licensee; the name of the cable; a brief description of the event, including root cause; the date and time of onset of the outage; nearest cable landing station; approximate location of the event (either in nautical miles from the nearest cable landing station or in latitude and longitude); best estimate of when the cable is scheduled to be repaired, including approximate arrival time and date of the repair ship, if applicable; a contact name, contact

email address, and contact telephone number by which the Commission's technical staff may contact the reporting entity. The Interim report is not required where the licensee has reported in the Notification that the outage at issue is a planned outage.

- (iv) The Final Outage Report is due seven days after the repair is completed. The Final Outage Report shall contain: The name of the reporting licensee; the name of the cable, the date and time of onset of the outage (for planned events, this is the start date and time of the repair); a brief description of the event; nearest cable landing station; approximate location of the event (either in nautical miles from the nearest cable landing station or in latitude and longitude); duration of the event (total amount of time connectivity is lost or 50 percent or more of the capacity is lost); whether the event was planned or unplanned; the restoration method; and a contact name, contact email address, and contact telephone number by which the Commission's technical staff may contact the reporting entity. The Final Report must also contain an attestation as described in paragraph (b)(2)(i) of this section.
- (v) The Notification, Interim Report, and Final Outage Reports are to be submitted electronically to the Commission. "Submitted electronically" refers to submission of the information using Commission-approved Web-based outage report templates. If there are technical impediments to using the Web-based system during the Notification stage, then a written Notification to the Commission by e-mail to the Chief, Public Safety and Homeland Security Bureau is permitted; such Notification shall contain the information required. Electronic

filing shall be effectuated in accordance with procedures that are specified by the

Commission by public notice.

(c) Confidentiality reports filed under this part will be presumed to be confidential.

Public access to reports filed under this part may be sought only pursuant to the

procedures set forth in 47 CFR 0.461. Notice of any requests for inspection of outage

reports will be provided pursuant to 47 CFR 0.461(d)(3).

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